



INSTRUCTIONAL PACKAGE

RES 101

Introduction to Respiratory Care

Effective Term

Fall 2022/Spring 2023/Summer 2023

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Fall 2022

COURSE PREFIX: RES 101

COURSE TITLE: Introduction to Respiratory Care

CONTACT HOURS: 2 Lec/3 Lab

CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

The Introduction to Respiratory Care is a foundational course for learning the basic skills respiratory therapist need in the healthcare field. In Respiratory 101, you will gain knowledge of the history, professional organizations, laws, ethics and behaviors expected in a respiratory therapist. You will also learn about the basic anatomy and physiology of the respiratory system, infection control procedures, and how oxygen and carbon dioxide is transported in the body.

COURSE DESCRIPTION:

This course includes introduction topics pertinent to entering the respiratory care profession, i.e., medical terminology, ethical issues, and legal issues.

PREREQUISITES/CO-REQUISITES:

Admission to the Respiratory Care Program. Required prerequisite courses must be completed with a grade of "C" or better.

***Online/Hybrid** courses require students to complete the [DLi Orientation Video](#) prior to enrolling in an online course.

REQUIRED MATERIALS:

Please visit the [BOOKSTORE](#) online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

Kacmarek, R.M., Stoller, J.K., & Heuer, A.H. (2021). Egan's Fundamentals of Respiratory Care (12th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323811217

Kacmarek, R.M., Stoller, J.K., & Heuer, A.H. (2021). Workbook for Egan's Fundamentals of Respiratory Care (12th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323553667

Beachey, W. (2018). Respiratory Anatomy and Physiology: Foundations for Clinical Practice (4th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323416375

Beachey, W. (2013). Workbook for Respiratory Anatomy and Physiology: Foundations for Clinical Practice (4th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323085861

ADDITIONAL REQUIREMENTS:

Stethoscope, finger pulse oximeter, blood pressure cuff, and pocket calculator.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. myHGTC and college email access.

STUDENT IDENTIFICATION VERIFICATION:

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

It is recognized that personal communication devices, including smart phones, can play a fundamental role in both education and urgent personal connections (for example, a school calling about a sick child). For this reason, use of such devices is permitted in the classroom, with specific reservations:

1. Please set all devices to 'silent' or 'vibrate' during instructional time.
2. Use of devices during testing is NOT allowed.
3. Please limit use of devices to urgent personal connections and educational purposes directly related to the course material being discussed.
4. If you receive an urgent text/call during class that requires immediate attention, please quietly excuse yourself from the classroom to respond to the call.
5. Please refrain from using 'ear buds' or continually using the device as a learning distraction. Professor retains the right to disallow the use of such devices should the policy become a distraction.
6. When on experiential rotations, students are expected to abide by the policies of that institution.

PLAGIARISM & CHEATING:

Refer to the College catalog & Student handbook HGTC Handbook.

The student may be assigned a failing grade for the course or may be required by the professor to withdraw from the course and/or the respiratory care program. Such actions are deemed to be unprofessional behavior within this program and will not be tolerated.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more

information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

1. Explain the purpose of professional elements of Respiratory Care.
2. Apply patient assessment skills to perform basic respiratory therapy procedures.
3. Perform proper Universal Precautions and Isolation Procedures.
4. Describe the anatomy and physiology of the respiratory system and cardiovascular system
5. Apply the anatomy and physiology of the respiratory system to ventilation.
6. Apply the factors that involve diffusion of gases within the body.
7. Describe the anatomy and physiology of the circulatory system.
8. Explain the factors that are involved in oxygen transport throughout the body.
9. Explain the factors that involve the movement of carbon dioxide and its role in acid-base balance.
10. Explain the effects of aging, high altitude, and high-pressure environments on the cardiopulmonary system.

Lab/Lecture 1

Material Covered: The Respiratory Care Profession, Laws, Ethics, Behaviors

History of Respiratory Care Chapter 1

Delivering Evidence Based Respiratory Care Chapter 2

Quality, Patient Safety, Communication, and, Recordkeeping Chapter 3

Ethical and Legal Implications of Practice Chapter 5

E-medicine in Respiratory Care Chapter 7

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes: (Affective-Behavior)

1. Learn about the respiratory care profession, laws, ethics, and behaviors.
2. Identify different recordkeeping practices and electronic applications.

Lecture/Lab 2

Materials Covered:

Principles of Infection Prevention and Control Chapter 4

Bedside Assessment of the Patient Chapter 16

Interpreting Clinical and Laboratory Data Chapter 17

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. How the physiological principles relate to respiratory care.
2. Performing patient interviews and patient assessments at the bedside.
3. Interpretation of normal clinical, laboratory data, and arterial blood gas analysis.

Lecture/Lab 3

Material Covered:

Gas Laws, Diffusion, and Oxygen Transport

Physical Principles of Respiratory Care Chapter 6 (Egans)

Ventilation Chapter 4 (Beachey)

Gas Diffusion Chapter 7 (Beachey)

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. Explain the factors that are involved in oxygen transport throughout the body.
2. Explain the factors that involve the movement of carbon dioxide and its role in acid-base balance.
3. Explain the effects of aging, high altitude, and high-pressure environments on the cardiopulmonary system.

Lecture/Lab 4

Material Covered:

The Airways and Alveoli Chapter 1 (Beachey)

The Lungs and Chest Wall Chapter 2 (Beachey)

Assessments

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. Identify the anatomy of the lungs and thoracic cavity.
2. Explain the transport of air into the respiratory system.
3. Explain the functions of ventilation in the respiratory system.
4. Identify the parts of the cardiovascular system.
5. Describe how blood travels through the cardiovascular and pulmonary system.

Lecture/Lab 5

Material Covered:

Lung Volumes and Capacity Chapter 5 (Beachey)

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. List the different lung volume values and capacities.

2. Explain why restrictive and obstructive diseases affect the FRC, the residual volume, and the work of breathing differently.

Lecture/Lab 6

Material Covered: X-ray Interpretations

Review of Thoracic Imaging Chapter 21

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. Describe how to evaluate the technical quality of a chest radiograph.
2. List the anatomic structures seen on the chest radiograph.
3. Describe the common radiographic abnormalities seen in the pleura, lung parenchyma, and mediastinum.
4. Understand the value of a computed tomography scan and the use of intravenous contrast.
5. Understand the role of ultrasound and magnetic resonance imaging in imaging the chest.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

Competency Areas:

Patient Assessment

Lung/Heart Anatomy

Breath Sounds Identification and Breathing Patterns

Calculations Lab and Terminology

Radiology Interpretations

EVALUATION*

Homework/Quizzes/Assignments	15%
Tests	60%
Final Exam	25%
	<hr/> 100%

****Students, for the specific number and type of evaluations, please refer to the Instructor’s Course Information Sheet.***

Skill Check Assessment:

The student is required to successfully complete each skill check assessment for the course prior to the final laboratory competency practical examination or per the instructor's schedule. The course instructor will announce the due date of the skill check assessments in the course calendar informational sheet. Failure to complete a skill check assessment will not allow the student to complete the laboratory competency practical examination, which will result in failure of the course.

Laboratory Competency Practical Examination:

A minimum of 85% and all critical elements must be achieved to pass the laboratory competency practical examination. Two attempts will be given for the competency. Students will only be allowed to try the competency one time per day. Failure to pass the competency within two (2) attempts will result in repeat of the failed course.

Summary Performance Evaluation

The following will be used to evaluate the clinical/lab performance:

Satisfactory – Completion of first attempt (85-100%) Performed procedure accurately or was able to correct performance without injury to the patient or decreasing effect of therapy being given.

Unsatisfactory performance – Completion of first attempt (less than <85%). Requires remediation under one of the following categories.

- The psychomotor portion of the performance evaluation is a pass/fail grading criterion. After a student's second attempt, if the student does not pass the physical portion with an 85% or greater. Failure of the physical portion of the course will result in failure of the course.
- Failure to complete a critical skill after the second attempt within the psychomotor evaluation will also result as a failure of the course.

GRADING SYSTEM:**GRADING SCALE:**

100 - 90 =	A
89 - 80 =	B
79 - 75 =	C
74 - 69 =	D
68 - 0 =	F

LATE ASSIGNMENTS:

1. A maximum of one (1) scheduled exam may be made up at the discretion of the course instructor. Any subsequently missed exams will receive a grade of 0.
2. Makeup examinations will be taken in the testing center on campus or a location designated by the instructor.
3. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.
4. All missed exams will incur a 10% overall deduction unless medical documentation is

provided.

5. Late Homework assignments will have a deduction of ten points of the total assignment grade. Homework will not be accepted after 5 days late.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

A tardy is given if the student arrives ten minutes after class starts or before class ends. Three tardies are equivalent to one absence.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.

3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at ssc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email ssc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

1. **Getting around HGTC:** General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center \(ORC\)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.

STUDENT TESTING:

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

EEO and Title IX Coordinator

Building 200, Room 212A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu